

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO
10/609,116	06/27/2003	Helmut W. Kucera	IR-3332(CRD)	9257
7590 08/10/2005			EXAMINER	
LORD CORPORATION			TUROCY, DAVID P	
111 Lord Drive P.O. 8012		·	ART UNIT PAPER NUMBER	
Cary, NC 27512-8012		•	1762	
			DATE MAILED: 08/10/2004	e .

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
Office Action Summer	10/609,116	KUCERA ET AL.				
Office Action Summary	Examiner	Art Unit 。				
The MAIL ING DATE of this account of	David Turocy	1762				
The MAILING DATE of this communication apperiod for Reply	ppears on the cover sheet with the	correspondence address				
A SHORTENED STATUTORY PERIOD FOR REP THE MAILING DATE OF THIS COMMUNICATION - Extensions of time may be available under the provisions of 37 CFR 1 after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a re - If NO period for reply is specified above, the maximum statutory perio - Failure to reply within the set or extended period for reply will, by statu. Any reply received by the Office later than three months after the mail earned patent term adjustment. See 37 CFR 1.704(b).	l. 1.136(a). In no event, however, may a reply be eply within the statutory minimum of thirty (30) d: d will apply and will expire SIX (6) MONTHS fro tte, cause the application to become ABANDON	timely filed ays will be considered timely. om the mailing date of this communication. VED (35 U.S.C. § 133).				
Status		•				
1) Responsive to communication(s) filed on 13	June 2005.					
	<u> </u>					
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is						
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims		•				
4)⊠ Claim(s) <u>1-13,15-28 and 30-34</u> is/are pendin	o in the application					
4a) Of the above claim(s) is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>1-13,15-28 and 30-34</u> is/are rejected.						
7) Claim(s) is/are objected to.						
8) Claim(s) are subject to restriction and	8) Claim(s) are subject to restriction and/or election requirement.					
Application Papers						
9) The specification is objected to by the Examiner.						
10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11) The oath or declaration is objected to by the I	Examiner. Note the attached Offic	ce Action or form PTO-152.				
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreignal All b) Some * c) None of: 1. Certified copies of the priority documents. 2. Certified copies of the priority documents.	nts have been received. nts have been received in Applica	ation No				
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).						
* See the attached detailed Office action for a list of the certified copies not received.						
Attachment(s)	_					
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 4) Interview Summary (PTO-413) Paper No(s)/Mail Date						
 Notice of Draπsperson's Patent Drawing Review (PTO-948) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08 Paper No(s)/Mail Date 7/14/05. 	_	Patent Application (PTO-152)				

U.S. Patent and Trademark Office PTOL-326 (Rev. 1-04)

DETAILED ACTION

Response to Amendment

1. The applicant's amendments, dated 6/13/2005, have been fully considered and reviewed by the examiner. In light of the amendment to the claims, the objection has been withdrawn. In addition, in light of the submission of the oath, dated 7/20/2005, the objection for a defective oath has been withdrawn. The examiner notes the amendments to the claims, the cancellation of claims 14 and 29 and the addition of new claim 34. Claims 1-13, 15-28, and 30-34 are pending.

Response to Arguments

2. Applicant's arguments filed 6/13/2005 have been fully considered but they are not persuasive.

The applicant has argued against the combination of Kucera and Brewer stating the two references are not analogous art because Kucera teaches of dipping a substrate in an aqueous dispersion and Brewer teaches of dipping in a tinning process. The applicant argues that for two references to be analogous, when they are not in the same field of endeavor, the references have to be pertinent to a particular problem with which the inventor was concerned and states the problems associated with the polymer dispersion in no way relates to the problems associated to tinning. The examiner respectfully disagrees. Both Kucera and Brewer are faced with the problem of immersing a substrate in a multiple solutions and Brewer discloses using an articulative electromechanical device to aid in the immersion process would increase the production

Art Unit: 1762

facility. While Brewer teaches of a tinning process, Brewer suggests to one of ordinary skill in the immersion art that providing an articulative electromechanical device when immersing a substrate in consecutive baths increase the efficiency. Therefore, taking the references collectively, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Kucera to use the articulative electromechanical device as suggested by Brewer to reap the benefits of a more efficient process with a reasonably expectation of successfully immersing a substrate in an aqueous dispersion. Please note that the test of obviousness is not an express suggestion of the claimed invention in any or all references, but rather what the references taken collectively would suggest to those of ordinary skill in the art presumed to be familiar with them (In re Rosselet, 146 USPQ 183).

The applicant also argues the Brewer reference only articulates the substrate after complete solidification and does not articulation with a wet film and has no technical objective than to reorient the substrate for the next dipping. However, such an argument is not commensurate in scope with the claims, where the claims do not require the film to be wet during the articulation. In addition the examiner notes the definition of articulate, as defined by the applicant at specification page 11, is in the broadest definition "motion, such as movement from a first point to a second point", where moving a substrate from one point to another, whether a small displacement or in a straight line, circle, etc. reads on the claim limitation. Therefore moving the substrate to reorient the substrate for immersion reads on articulation.

The applicant has argued against the Kucera and Brewer reference stating neither reference teaches of a substrate displacing at least 0.25% of the volume of the bath and a bath turnover of 1 hour to 5 days. In addition the applicant argues the prior art references do not disclose any modifications to the geometry of the bath with the surface area of the substrate. Such an argument is not commensurate in scope with the claims. The claims only require immersing a substrate in an immersion bath with an articulative electromechanical device and do not require any certain geometry of the bath relative to the surface area of the substrate. Therefore, since the prior art references teach all the same process steps, i.e. require immersing a substrate in an immersion bath with an articulative electromechanical device, as set forth above and in the office action dated 12/8/2004, the immersion process as taught by Kucera in view of Brewer must result in the displaced volume and bath turnover. Either 1) the applicant and the prior art have different definitions for immersing a substrate in a bath with an articulative electromechanical device, or 2) the applicant is using other process steps or parameters that are not shown in the claims.

Claim Rejections - 35 USC § 103

- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Application/Control Number: 10/609,116

Art Unit: 1762

4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Page 5

5. Claims 1-3, 5-11, 12-13, 15-16, 19-21, 23-26, and 27-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 00/43131 by Kucera et al. ("Kucera") in view of US Patent 4766844 by Brewer et al ("Brewer").

These claims are rejected for the same reasons as set forth in the office action dated 12/8/2004 as well as for the reasons set forth in section 2 above.

6. Claims 4, 15, 22, and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 00/43131 by Kucera et al. ("Kucera") in view of US Patent 4766844 by Brewer et al ("Brewer") and further in view of US Patent 4657788 by Benton et al ('Benton').

Application/Control Number: 10/609,116

Art Unit: 1762

These claims are rejected for the same reasons as set forth in the office action dated 12/8/2004 as well as for the reasons set forth in section 2 above.

Page 6

7. Claims 17 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 00/43131 by Kucera et al. ("Kucera") in view of US Patent 4766844 by Brewer et al ("Brewer") and US Patent 4657788 by Benton et al ('Benton') and further in view of US Patent 4103049 by Nishida et al ("Nishida").

These claims are rejected for the same reasons as set forth in the office action dated 12/8/2004 as well as for the reasons set forth in section 2 above.

8. Claims 32 and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 00/43131 by Kucera et al. ("Kucera") in view of US Patent 4766844 by Brewer et al ("Brewer") and further in view of US Patent 4103049 by Nishida et al ("Nishida").

These claims are rejected for the same reasons as set forth in the office action dated 12/8/2004 as well as for the reasons set forth in section 2 above.

Conclusion

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

Art Unit: 1762

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David Turocy whose telephone number is (571) 272-2940. The examiner can normally be reached on Monday-Friday 8:30-6:00, No 2nd Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy Meeks can be reached on (571) 272-1423. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Application/Control Number: 10/609,116

Art Unit: 1762

Page 8

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

David Turocy Au 1762

TIMOTHY MEEKS
SUPERVISORY PATENT EXAMINER